BEST AVAILABLE COPY PATENT COOPERATION TREATY

**PCT** 

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference                     | FOR FURTHER   |  |
|---|---|--|
| 16894   |   | see Form PCT/ISA/220<br>as well as, where applicable, item 5 below.                                  |
| nternational application No.                              | International filing date (day/month/yea  | ar) (Earliest) Priority Date (day/month/year)  |
| PCT/CA2004/000998   | 08/07/2004  | .08/07/2003  |
| pplicant  |   | .0070772003  |
|   | ·   |  |
| CGILL UNIVERSITY  |   |  |
|   |   |  |
| This International Search Report has bee                  | n prepared by this International Searchine  | g Authority and is transmitted to the applicant  |
|   | the mid mid man boreau.   | o and to transmitted to the applicant  |
| This International Search Report consists                 | of a total of sheets.   |  |
| X It is also accompanied by                               | a copy of each prior art document cited i   | n this report.   |
|   |   | <u> </u>   |
| Basis of the report     With regard to the language the   | into-mating all and a   |  |
| language in which it was filed, unl                       | international search was carried out on these otherwise indicated under this item.  | ne basis of the international application in the   |
|   |   | •  |
| this Authority (Ru  | search was carried out on the basis of a t<br>le 23.1(b)).  | translation of the international application furnished to  |
| b. With regard to any nucleo                              | otide and/or amino acid sequence discl  | osed in the international application, see Box No. I.  |
| , , ,   | and and a control of the control of | osed in the international application, see Box No. I.  |
| . Certain claims were four                                | nd unsearchable (See Box II).   |  |
|   |   |  |
| Unity of invention is lack                                | king (see Box III).   |  |
| With regard to the title                                  |   |  |
|   |   |  |
|   |   | •  |
| ine text has been establish                               | ned by this Authority to read as follows:   | •  |
|   |   | ·  |
| •   |   |  |
|   | •   |  |
|   | ·   |  |
|   |   |  |
|   |   |  |
|   |   |  |
| With regard to the abstract,                              |   | ·  |
| X the text is approved as sub-                            | mitted by the applicant   |  |
| the text has been established                             | ed according to Bulo 39 3/h) hunting Aus  | thank, as to a second  |
| may, within one month from                                | the date of mailing of this international s   | thority as it appears in Box No. IV. The applicant search report, submit comments to this Authority. |
|   | •   |  |
| With regards to the drawings,                             | F. A. S. S.   |  |
| the rigule of the drawings to be put                      | olished with the abstract is Figure No  | ·  |
| as suggested by the                                       |   |  |
| as selected by this A                                     | Authority, because the applicant failed to  | suggest a figure.  |
|   |   | 3  |
| as selected by this A b. X none of the figures is to be p | Authority, because this figure better chara   | acterizes the invention.   |

## BEST AVAILABLE COPY

INTENATIONAL SEARCH REPORT

PCT/CA2004/000998

| A. CLASS                         | SIFICATION OF SUBJECT MATTER   |  |   |  |
|----------------------------------|--|--|---|--|
| IPC 7                            | C12N5/06 A01K67/027  |  |   |  |
|                                  |  |  |   |  |
| ļ                                |  |  |   |  |
| According                        | to International Patent Classification (IPC) or to both national class   | sification and IPC   |   |  |
|                                  | SEARCHED   |  |   |  |
| Minimum o                        | ocumentation searched (classification system followed by classification system)  | cation symbols)  | <u> </u>  |  |
| IPC 7                            | C12N A01K  |  |   |  |
|                                  | ·  |  |   |  |
|                                  |  | <u> </u>   |   |  |
| Documenta                        | ition searched other than minimum documentation to the extent the  | at such documents are included in the fields se  | arched  |  |
|                                  |  |  |   |  |
| Electronic                       | data base consulted during the   |  | •   |  |
|                                  |  |  |   |  |
| EPO-In                           | ternal, WPI Data, PAJ, BIOSIS, EMB   | ASF  |   |  |
|                                  | ,  |  |   |  |
| 1                                | •  |  | nt passages  Relevant to claim No.  fetal derived embryo  (OF OF O |  |
|                                  | •  | •  |   |  |
| C. DOCUM                         | ENTS CONSIDERED TO BE RELEVANT   |  |   |  |
| Category °                       |  |  |   |  |
| Category                         | Citation of document, with indication, where appropriate, of the   | relevant passages  | Relevant to claim No.   |  |
|                                  |  |  |   |  |
| χ                                | EGGAN KEVIN ET Al: "Hybrid via   | or fatal   |   |  |
|                                  | overgrowth, and viability of mid   | ce derived   | 3,6-13,   |  |
|                                  | by nuclear cloning and tetraplo  | id embryo  | 20-22   |  |
|                                  | complementation"   | id embi yo   |   |  |
| :                                | PROCEEDINGS OF THE NATIONAL ACAI   | DEMY OF  | •   |  |
|                                  | SCIENCES OF USA NATIONAL ACADEM  | AV OF  |   |  |
|                                  | SCIENCE. WASHINGTON, US,   | TI OF  | •   |  |
|                                  | vol. 98 no 11 22 May 2001 (20  | 101 OF 221   |   |  |
|                                  | pages 6209-6214, XP002206043   | 701-05-22),  |   |  |
|                                  | ISSN: 0027-8424  |  | ,   |  |
|                                  | cited in the application   |  |   |  |
| Υ                                | the whole document   |  | _   |  |
|                                  | and whole document   |  | 2,4,5   |  |
|                                  |  | ·  |   |  |
|                                  |  | -/   |   |  |
|                                  | •  |  |   |  |
|                                  |  |  |   |  |
|                                  |  |  |   |  |
|                                  | •  |  | •   |  |
|                                  | •  |  | i   |  |
|                                  |  |  |   |  |
| X Furth                          | er documents are listed in the continuation of box C.  | Patent family manh and it  |   |  |
| <u> </u>                         |  | rateril family members are listed in   | annex.  |  |
| <ul> <li>Special cate</li> </ul> | egories of cited documents :   | ATT.   |   |  |
| "A" documer                      | it defining the general state of the art which is not  | Of Difference and not in confirm with the  | e application but   |  |
| conside                          | red to be of particular relevance  | cited to understand the principle or theo  | ry underlying the   |  |
| "E" earlier do<br>filing da      | fler document but published on or after the international  |  |   |  |
| "L" documen                      | which may throw doubts on priority, claim(s) or  | Carriol De Considered novel or cannot b  | a considered to   |  |
| wnich is                         | cited to establish the publication date of another or other special reason (as specified)  | "Y" document of particular relevance: the claim  | ment is taken alone   |  |
|                                  | it referring to an oral disclosure, use, exhibition or   | Accommend to particular relevance; the daimed invention cannot be considered normal search  Total search search  Total search search search search search search search  Total search  Total search  Total search  Total search search search search search search  Total search search  Total search  T |   |  |
| other m                          | other means duction of the complete of the com |  |   |  |
| later tha                        | t published prior to the international filing date but<br>n the priority date claimed  | in the art.  | I   |  |
|                                  |  | <del></del>  |   |  |
| out of the at                    | tual completion of the international search  | Date of mailing of the international search  | report  |  |
| 20                               | Ontoham 2004   |  | 1   |  |
| 22                               | October 2004   | 08/11/2004   |   |  |
| Name and ma                      | iling address of the ISA   |  |   |  |
|                                  | European Patent Office, P.B. 5818 Patentiaan 2   | Authorized officer   |   |  |
|                                  | NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  |  | 1   |  |
|                                  | Fax: (+31-70) 340-3016   | Brouns, G  |   |  |
|                                  |  |  |   |  |

## INTERNATIONAL SEARCH REPORT

PCT/CA2004/000998

| YAGI TAKESHI ET AL: "A novel ES cell line, TT2, with high germline-differentiating potency" ANALYTICAL BIOCHEMISTRY, vol. 214, no. 1, 1993, pages 70-76, XP002302001 ISSN: 0003-2697 table 1  JASIN MARIA ET AL: "Targeted transgenesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 93, no. 17, 1996, pages 8804-8808, XP002302284 ISSN: 0027-8424 the whole document   | 1,2,<br>14-16<br>17-19<br>2,4,5,<br>17-19 |
|--|---|
| line, TT2, with high germline-differentiating potency" ANALYTICAL BIOCHEMISTRY, vol. 214, no. 1, 1993, pages 70-76, XP002302001 ISSN: 0003-2697 table 1  JASIN MARIA ET AL: "Targeted transgenesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 93, no. 17, 1996, pages 8804-8808, XP002302284 ISSN: 0027-8424 the whole document  SUZUKI O ET AL: "Effect of genetic background on establishment of mouse embryonic stem cells" EXPERIMENTAL ANIMALS, TOKYO, JP | 14-16<br>17-19<br>2,4,5,                  |
| vol. 214, no. 1, 1993, pages 70-76, XP002302001 ISSN: 0003-2697 table 1  JASIN MARIA ET AL: "Targeted transgenesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 93, no. 17, 1996, pages 8804-8808, XP002302284 ISSN: 0027-8424 the whole document  SUZUKI O ET AL: "Effect of genetic background on establishment of mouse embryonic stem cells" EXPERIMENTAL ANIMALS, TOKYO, JP.  | 2,4,5,                                    |
| ISSN: 0003-2697 table 1  JASIN MARIA ET AL: "Targeted transgenesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 93, no. 17, 1996, pages 8804-8808, XP002302284 ISSN: 0027-8424 the whole document  SUZUKI O ET AL: "Effect of genetic background on establishment of mouse embryonic stem cells" EXPERIMENTAL ANIMALS, TOKYO, JP.  | 2,4,5,                                    |
| transgenesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 93, no. 17, 1996, pages 8804-8808, XP002302284 ISSN: 0027-8424 the whole document  SUZUKI O ET AL: "Effect of genetic background on establishment of mouse embryonic stem cells" EXPERIMENTAL ANIMALS, TOKYO, JP.  |   |
| the whole document  SUZUKI O ET AL: "Effect of genetic background on establishment of mouse embryonic stem cells"  EXPERIMENTAL ANIMALS, TOKYO, JP.  |   |
| background on establishment of mouse embryonic stem cells" EXPERIMENTAL ANIMALS, TOKYO, JP   |   |
| 1 401. 40, 110. 5, 1333, pages 215-216.  | 1-22                                      |
| XP002969405<br>ISSN: 1341-1357<br>the whole document   | ٠.  |
| NAGY A ET AL: "Derivation of completely cell culture-derived mice from early-passage embryonic stem cells" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 90, no. 18, 15 September 1993 (1993-09-15), pages 8424-8428, XP002182191 ISSN: 0027-8424  | 1-22                                      |
| cited in the application the whole document  |   |
| GARDNER R L ET AL: "REFLECTIONS ON THE BIOLOGY OF EMBRYONIC STEM (ES) CELLS" INTERNATIONAL JOURNAL OF DEVELOPMENTAL BIOLOGY, UNIVERSITY OF THE BASQUE COUNTRY PRES, LEIOA, ES,   | 1-22                                      |
| vol. 41, April 1997 (1997-04), pages<br>235-243, XP000944588<br>ISSN: 0214-6282<br>table 2   |   |
| -/   |   |
|  |   |
|  |   |

## BEST AVAILABLE COPY

INTENATIONAL SEARCH REPORT

ernational Application No PCT/CA2004/00099

| C.(Continua | tion) DOCUMENTS CONSIDERED TO BE RELEVANT   | PCT/CA20 | 04/000998                   |
|-------------|---|----------|-----------------------------|
|             | Citation of document, with indication, where appropriate, of the relevant passages  |          | Indiana                     |
|             |   |          | Relevant to claim No.       |
| A           | CROSS J C: "Factors affecting the developmental potential of cloned mammalian embryos" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 98, no. 11, 22 May 2001 (2001-05-22), pages 5949-5951, XP002971417 ISSN: 0027-8424 cited in the application the whole document |          | 1                           |
| , X         | FARHADI HOOMAN F ET AL: "A combinatorial network of evolutionarily conserved myelin basic protein regulatory sequences confers distinct glial-specific phenotypes."  JOURNAL OF NEUROSCIENCE, vol. 23, no. 32, 12 November 2003 (2003-11-12), pages 10214-10223, XP008037383 ISSN: 0270-6474 cited in the application           |          | 1-4,6-8,<br>11,12,<br>20-22 |
|             | page 10215, line R, paragraphs 5,6  |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   |          |                             |
|             |   | ·        |                             |
|             | timustion of second sheet) ( Inguis 2004)   |          |                             |